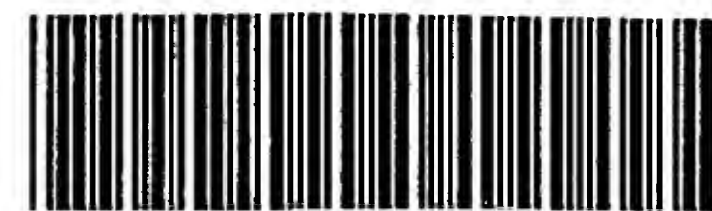


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/553,659
Source: PCT
Date Processed by STIC: 10/28/2005

ENTERED



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/553,659

DATE: 10/28/2005

TIME: 09:18:12

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

4 <110> APPLICANT: Manoharan, Muthiah
 6 <120> TITLE OF INVENTION: PROTECTED MONOMERS
 9 <130> FILE REFERENCE: 14174-070US1
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/553,659
 C--> 11 <141> CURRENT FILING DATE: 2005-10-17
 11 <150> PRIOR APPLICATION NUMBER: PCT/US2004/011822
 12 <151> PRIOR FILING DATE: 2004-04-16
 14 <150> PRIOR APPLICATION NUMBER: US 60/465,665
 15 <151> PRIOR FILING DATE: 2003-04-25
 17 <150> PRIOR APPLICATION NUMBER: US 60/463,772
 18 <151> PRIOR FILING DATE: 2003-04-17
 20 <150> PRIOR APPLICATION NUMBER: US 60/469,612
 21 <151> PRIOR FILING DATE: 2003-05-09
 23 <150> PRIOR APPLICATION NUMBER: US 60/465,802
 24 <151> PRIOR FILING DATE: 2003-04-25
 26 <150> PRIOR APPLICATION NUMBER: US 60/493,986
 27 <151> PRIOR FILING DATE: 2003-08-08
 29 <150> PRIOR APPLICATION NUMBER: US 60/494,597
 30 <151> PRIOR FILING DATE: 2003-08-11
 32 <150> PRIOR APPLICATION NUMBER: US 60/506,341
 33 <151> PRIOR FILING DATE: 2003-09-26
 35 <150> PRIOR APPLICATION NUMBER: US 60/510,246
 36 <151> PRIOR FILING DATE: 2003-10-09
 38 <150> PRIOR APPLICATION NUMBER: US 60/510,318
 39 <151> PRIOR FILING DATE: 2003-10-10
 41 <150> PRIOR APPLICATION NUMBER: US 60/518,453
 42 <151> PRIOR FILING DATE: 2003-11-07
 44 <150> PRIOR APPLICATION NUMBER: PCT/US04/07070
 45 <151> PRIOR FILING DATE: 2004-03-08
 47 <150> PRIOR APPLICATION NUMBER: PCT/US04/010586
 48 <151> PRIOR FILING DATE: 2004-04-05
 50 <150> PRIOR APPLICATION NUMBER: PCT/US04/011255
 51 <151> PRIOR FILING DATE: 2004-04-09
 53 <160> NUMBER OF SEQ ID NOS: 28
 55 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 58 <210> SEQ ID NO: 1
 59 <211> LENGTH: 16
 60 <212> TYPE: PRT
 61 <213> ORGANISM: Artificial Sequence
 63 <220> FEATURE:
 64 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
 66 <400> SEQUENCE: 1
 67 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys

CP9-6)

RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/553,659

TIME: 09:18:12

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

```

68 1 5 10 15
70 <210> SEQ ID NO: 2
71 <211> LENGTH: 14
72 <212> TYPE: PRT
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
78 <400> SEQUENCE: 2
79 Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Cys
80 1 5 10
82 <210> SEQ ID NO: 3
83 <211> LENGTH: 27
84 <212> TYPE: PRT
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
90 <400> SEQUENCE: 3
91 Gly Ala Leu Phe Leu Gly Trp Leu Gly Ala Ala Gly Ser Thr Met Gly
92 1 5 10 15
93 Ala Trp Ser Gln Pro Lys Lys Lys Arg Lys Val
94 20 25
96 <210> SEQ ID NO: 4
97 <211> LENGTH: 18
98 <212> TYPE: PRT
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
104 <400> SEQUENCE: 4
105 Leu Leu Ile Ile Leu Arg Arg Arg Ile Arg Lys Gln Ala His Ala His
106 1 5 10 15
107 Ser Lys
110 <210> SEQ ID NO: 5
111 <211> LENGTH: 26
112 <212> TYPE: PRT
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
118 <400> SEQUENCE: 5
119 Gly Trp Thr Leu Asn Ser Ala Gly Tyr Leu Leu Lys Ile Asn Leu Lys
120 1 5 10 15
121 Ala Leu Ala Ala Leu Ala Lys Lys Ile Leu
122 20 25
124 <210> SEQ ID NO: 6
125 <211> LENGTH: 18
126 <212> TYPE: PRT
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Amphiphilic model peptide
132 <400> SEQUENCE: 6

```

RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/553,659

TIME: 09:18:12

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

133 Lys Leu Ala Leu Lys Leu Ala Leu Lys Ala Leu Lys Ala Ala Leu Lys
 134 1 5 10 15
 135 Leu Ala
 138 <210> SEQ ID NO: 7
 139 <211> LENGTH: 9
 140 <212> TYPE: PRT
 141 <213> ORGANISM: Artificial Sequence
 143 <220> FEATURE:
 144 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
 146 <400> SEQUENCE: 7
 147 Arg Arg Arg Arg Arg Arg Arg Arg Arg
 148 1 5
 150 <210> SEQ ID NO: 8
 151 <211> LENGTH: 10
 152 <212> TYPE: PRT
 153 <213> ORGANISM: Artificial Sequence
 155 <220> FEATURE:
 156 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptide
 158 <400> SEQUENCE: 8
 159 Lys Phe Phe Lys Phe Phe Lys Phe Phe Lys
 160 1 5 10
 162 <210> SEQ ID NO: 9
 163 <211> LENGTH: 37
 164 <212> TYPE: PRT
 165 <213> ORGANISM: Artificial Sequence
 167 <220> FEATURE:
 168 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
 170 <400> SEQUENCE: 9
 171 Leu Leu Gly Asp Phe Phe Arg Lys Ser Lys Glu Lys Ile Gly Lys Glu
 172 1 5 10 15
 173 Phe Lys Arg Ile Val Gln Arg Ile Lys Asp Phe Leu Arg Asn Leu Val
 174 20 25 30
 175 Pro Arg Thr Glu Ser
 176 35
 178 <210> SEQ ID NO: 10
 179 <211> LENGTH: 31
 180 <212> TYPE: PRT
 181 <213> ORGANISM: Artificial Sequence
 183 <220> FEATURE:
 184 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
 186 <400> SEQUENCE: 10
 187 Ser Trp Leu Ser Lys Thr Ala Lys Lys Leu Glu Asn Ser Ala Lys Lys
 188 1 5 10 15
 189 Arg Ile Ser Glu Gly Ile Ala Ile Ala Ile Gln Gly Gly Pro Arg
 190 20 25 30
 192 <210> SEQ ID NO: 11
 193 <211> LENGTH: 30
 194 <212> TYPE: PRT
 195 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/553,659

TIME: 09:18:12

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

```

197 <220> FEATURE:
198 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
200 <400> SEQUENCE: 11
201 Ala Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
202 1 5 10 15
203 Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
204 20 25 30
206 <210> SEQ ID NO: 12
207 <211> LENGTH: 36
208 <212> TYPE: PRT
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
214 <400> SEQUENCE: 12
215 Asp His Tyr Asn Cys Val Ser Ser Gly Gly Gln Cys Leu Tyr Ser Ala
216 1 5 10 15
217 Cys Pro Ile Phe Thr Lys Ile Gln Gly Thr Cys Tyr Arg Gly Lys Ala
218 20 25 30
219 Lys Cys Cys Lys
220 35
222 <210> SEQ ID NO: 13
223 <211> LENGTH: 12
224 <212> TYPE: PRT
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
230 <400> SEQUENCE: 13
231 Arg Lys Cys Arg Ile Val Val Ile Arg Val Cys Arg
232 1 5 10
234 <210> SEQ ID NO: 14
235 <211> LENGTH: 42
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
242 <400> SEQUENCE: 14
243 Arg Arg Arg Pro Arg Pro Pro Tyr Leu Pro Arg Pro Arg Pro Pro Pro
244 1 5 10 15
245 Phe Phe Pro Pro Arg Leu Pro Pro Arg Ile Pro Pro Gly Phe Pro Pro
246 20 25 30
247 Arg Phe Pro Pro Arg Phe Pro Gly Lys Arg
248 35 40
250 <210> SEQ ID NO: 15
251 <211> LENGTH: 13
252 <212> TYPE: PRT
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Exemplary Cell Permeation Peptides
258 <400> SEQUENCE: 15

```

RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/553,659

TIME: 09:18:12

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

```

259 Ile Leu Pro Trp Lys Trp Pro Trp Trp Pro Trp Arg Arg
260 1 5 10
262 <210> SEQ ID NO: 16
263 <211> LENGTH: 16
264 <212> TYPE: PRT
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <223> OTHER INFORMATION: Synthetically generated peptide
270 <400> SEQUENCE: 16
271 Ala Ala Val Ala Leu Leu Pro Ala Val Leu Leu Ala Leu Leu Ala Pro
272 1 5 10 15
274 <210> SEQ ID NO: 17
275 <211> LENGTH: 11
276 <212> TYPE: PRT
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Synthetically generated peptide
282 <400> SEQUENCE: 17
283 Ala Ala Leu Leu Pro Val Leu Leu Ala Ala Pro
284 1 5 10
286 <210> SEQ ID NO: 18
287 <211> LENGTH: 13
288 <212> TYPE: PRT
289 <213> ORGANISM: Human immunodeficiency virus
291 <400> SEQUENCE: 18
292 Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln
293 1 5 10
295 <210> SEQ ID NO: 19
296 <211> LENGTH: 16
297 <212> TYPE: PRT
298 <213> ORGANISM: Drosophila Antennapedia
300 <400> SEQUENCE: 19
301 Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
302 1 5 10 15
304 <210> SEQ ID NO: 20
305 <211> LENGTH: 21
306 <212> TYPE: DNA
307 <213> ORGANISM: Artificial Sequence
309 <220> FEATURE:
310 <223> OTHER INFORMATION: "Dual targeting" siRNAs
312 <220> FEATURE:
313 <221> NAME/KEY: misc_feature
314 <222> LOCATION: 20, 21
315 <223> OTHER INFORMATION: n = dT= deoxythymidine
317 <400> SEQUENCE: 20
W--> 318 uaccagcacc caggugcugn n
320 <210> SEQ ID NO: 21
321 <211> LENGTH: 21
322 <212> TYPE: DNA

```

21

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/553,659

DATE: 10/28/2005
TIME: 09:18:13

Input Set : A:\14174-070US1.txt
Output Set: N:\CRF4\10282005\J553659.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:20; N Pos. 20,21
Seq#:21; N Pos. 20,21
Seq#:22; N Pos. 1,2
Seq#:23; N Pos. 1,2
Seq#:24; N Pos. 5,20,21
Seq#:25; N Pos. 16,20,21
Seq#:26; N Pos. 1,2,7
Seq#:27; N Pos. 1,2,18

VERIFICATION SUMMARY

DATE: 10/28/2005

PATENT APPLICATION: US/10/553,659

TIME: 09:18:13

Input Set : A:\14174-070US1.txt

Output Set: N:\CRF4\10282005\J553659.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0

L:334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0

L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0

L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0

L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0

L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0

L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0

L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0